

**SOPN Technical Committee Meeting  
Via Teleconference April 20, 2005  
1:00 PM Mountain Time, 2:00 PM Central Time**

Attending: Paul Eubank (LAMR), Steve Burrough (CHIC), Fran Pannebaker (BEOL), Karl Zimmermann (SAND), Brian Carey (LYJO), Brian Quigley (CAVO), Daniel Jacobs (PECO), Alexa Roberts (SAND), Dusty Perkins (SOPN Network Coordinator), Heidi Sosinski (SOPN Data Manager), Jason Lott (LYJO), Kelsey Cassidy (Guadalupe Mtns. NP, Intake Program on shadow assignment at LYJO).

**Major Action Items**

- A. Discuss and Review Plans for Aquatic Conceptual Model Workshop
- B. Review/ Approve Plan for NPSpecies Vertebrate Certification
- C. Review Preliminary Concepts for Prioritization and Selection of Vital Signs
- D. Review/Approve Plan for Reviewing Phase I Report

**I. SOPN Progress Report**

- Vegetation Mapping – Field work will be beginning this summer at WABA, FOUN, CAVO, PECO, LYJO, FOLS, BEOL, SAND and LAMR. Chris Lea (Vegetation Mapping Program) will coordinate work at WABA and LAMR that will be completed by J.R. Bell, a retired Bureau of Reclamation Employee. D. Perkins will coordinate work at FOLS (J. Delisle of Kansas Natural Heritage Inventory [KNHI]), BEOL and SAND (J. Stevens of Colorado Natural Heritage Program [CNHP]), LYJO and San Antonio Missions NHP (SAAN) (Roger Sanders of Botanical Research Institute of Texas [BRIT]), FOUN, CAVO, and PECO (Esteban Muldavin of Natural Heritage New Mexico [NHNM]). Dusty has received cost estimates from BRIT and KNHI, and is waiting for estimates from NHNM and CNHP. When all estimates are in the Vegetation Mapping Program will transfer money to the SOPN account. The work at SAAN is being completed with LYJO at the request of the Vegetation Mapping program since the two parks are in close proximity and both can be completed by Dr. Sanders. All of this work is being paid for by the vegetation mapping program, SOPN has committed to overseeing logistics, conducting data entry, and having one person from each park commit to assisting the researchers in the field for 1-2 weeks this summer. This will initiate on vegetation maps on all parks except for CHIC, which we hope to start in FY06
- Supplemental plant inventory at LYJO – This is being combined with the vegetation mapping. Originally, this was a low priority item on SOPN's Inventory Needs List approved in August, 2004. When the vegetation inventory work was completed it was a dry year and BRIT recommended coming back in a wet year. SOPN decided to fund this project even though it was a low priority for several reasons. First we already had BRIT coming to the park this year for the vegetation map, it has been a wet year and you never know when the next wet year will be, and the cost was low (\$3,000, of which LYJO paid \$1,500).
- LYJO Deep water fish survey – J. Lott worked with LCRA (Lower Colorado River Authority) to conduct a deep water fish survey at LYJO at no cost. Four new species were discovered. The vertebrate work completed by The Nature Conservancy had only sampled shallow areas with seine nets.
- SAND Bird inventory – The project will begin this summer with the Rocky Mountain Bird Observatory (RMBO) from funds allocated last year. A plan for field work have been submitted and approved. David Hanni is the coordinator. F. Pannebaker said RMBO be surveying on 4/21-22 for rare species such as lesser prairie chickens and mountain plovers. Additional surveys will be conducted this summer for songbirds.
- SAND Plant Inventory – Roy Roth from Colorado State University will be performing this inventory. A project statement has been completed with the Rocky Mountain CESU.

- BEOL Fish and Wetland Plants – A call for proposals has been sent out to the Rocky Mountain, Gulf Coast and Great Plains CESU's. We have received interest from the Bureau of Reclamation, Texas A+M, Montana State, and Troy State.
- Student Updates
  - Texas A+M: Todd Swanack and Tomye Zettner will be coming on for 2 to 3 months this summer. Tulia De Fex, a Ph.D. student, will be working with SOPN for the next three years. Protocol development is one of her primary dissertation products.
  - University of Colorado, Boulder – Initially, Karie Cherwin was to attend Colorado as a Ph.D. student under Tim Seastedt. However, she did not get into graduate school this summer. T. Seastedt thought this was due to his inability to free up an assistantship to fund her through the academic year. K. Cherwin will still work for us this summer for approximately 4 months in Johnson City. In the fall, D. Perkins will work with T. Seastedt and possibly K. Cherwin to determine the next steps. K. Cherwin may pursue graduate school again, or T. Seastedt may find other ways to fill his obligation to SOPN of providing 9 months of salary for a graduate student.
- Training Updates
  - Heidi will be attending the grant writing workshop the first week of May. She will also be going to the NCPN network for a week-long mentoring assignment.
  - Dusty will be attending the IMR I+M Sampling Design Workshop, ROMN's Vital Signs Selection Workshop, Fundamentals V and Supervisor's Basic Training. He has completed the online COR and Paul Geissler Sampling courses.
- Funding Update – Funding figures should appear in the system soon. SOPN should receive \$224,904 in Vital Signs Money and \$28,600 in Water Quality Money for a total of \$253,218 for FY05.

## II. Conceptual Model Workshops

- A combined Aquatic Workshop/Annual SOPN meeting will be held the week of August 8-12 at Highland University (Las Vegas, NM). The workshop will be held on the first two days (August 9 and 10) and is to be conducted in a similar manner to the grasslands workshop. The focus will be on riparian systems. A list of potential subject matter experts has been compiled. With the exception of the facilitators (Cathie Jean from Greater Yellowstone Network [GRYN] and Andy Hubbard from Sonoran Desert Network [SODN]), no invitations have yet been sent. The format for the workshop will largely follow the format used at the Grassland workshop in Cheyenne, OK. SOPN's annual meeting will be held on Thursday the 11<sup>th</sup> and the morning of Friday the 12<sup>th</sup>.
- D. Perkins asked if there were any final comments regarding the Grassland Workshop. A. Roberts asked what is the plan for updating the models? D. Perkins answered that we have received revised stressor models from Dan Tinker. Also, based on suggestions from the workshop, D. Tinker has produced some additional models. One is a pictorial model which outlines major processes and another is an overall concept model based on the Jenny-Chapin Model. The stressor, Jenny-Chapin and pictorial models are all near completion. D. Tinker is also working on a state transition model for fire and grazing and one for below-ground processes. D. Perkins has commented on one version, which still needed a lot of work. Additional note not discussed at meeting: D. Tinker will also work with G. Bowser this summer to develop a prairie dog process model.
- A. Roberts asked if these models would provide useful examples for the aquatic workshop? D. Perkins answered that these are indeed useful examples to use as what kinds of models we want developed. Sue Braumiller, who was present at the grassland workshop, is currently working on the aquatic models and will have examples of each type ready for the meeting. D. Perkins plans to

work with S. Braumiller to have these models a lot further along than the ones D. Tinker presented at the Grassland Workshop.

- It is anticipated that there will be three separate breakouts at the meeting. One will cover river and streams, while the other will cover reservoirs. D. Perkins said that the third could either be freshwater wetlands or landscape issues, D. Perkins recommended the latter as it was applicable to more parks than the wetlands. D. Jacobs asked if he thought we were trying to do too much at this meeting, D. Perkins did not think so, as adding a third breakout would only increase the number of experts, and the number of technical committee members would be the same. **Action Item: The Committee approved the proposed breakout groups of rivers and streams, reservoirs, and landscape issues, and that the workshop would largely follow the format of the Grassland Workshop. The Committee also approved having S. Braumiller, A. Hubbard (SODN) and C. Jean (GRYN) as facilitators.**
- Wetlands, pinyon/juniper, deciduous forest, and landscape vulnerability models still need to be developed. These will be done in-house by modifying existing models from other networks. Drafts will be sent around for a peer review. D. Perkins has started the wetlands model and plans to work on them this summer with the graduate students.
- D. Perkins asked if having 3 to 5 subject matter experts per group was sufficient. Due to budget restraints, we are unable to invite more than this number. The general consensus was that this was indeed sufficient.
- **Action Item: A list of potential subject matter experts was presented and the floor was opened for additional areas of expertise or particular subject matter experts that should be invited to the workshop. The following suggestions were made: Kevin Noon of NPS AWater Resources Division (A. Roberts), Kurk Patten of New Mexico Game and Fish (D. Jacobs), someone from USGS Oklahoma City (S. Burrough), and someone from USGS Austin (B. Carey. B. Carey also suggested we incorporate some groundwater expertise, we plan to with S. Braumiller, and potentially G. Longley (Texas State) and the USGS folks mentioned above. S. Burrough said that W. Fisher (Oklahoma State) and J. Lott said T. Bonner (Texas State) were good people to invite to the workshop.**

### III. NPSpecies Certification

- H. Sosinski presented the plan for certifying NPSpecies data. Emphasis will be placed on vertebrates in FY2005. This is a smaller and less complicated dataset compared to plants. Certifying this subset will serve as a test bed for a plant certification in FY06.
- The PI's from the completed inventories were contacted this week to see if they will assist in reviewing the checklist fields and preliminary local classification. So far, favorable responses have been received from Kristine Johnson (CAVO, FOUN, and PECO), Greg Smith (WABA) and Jennifer DeLisle (FOLS).
- It is planned to have the management fields reviewed by park staff after the checklist field review is completed (early June). This is a simple review, requiring park staff to check if a species is a pest, a management priority or an exploit concern. Once this is complete, H. Sosinski will compile all the data and complete the certification.
- Update on Texas parks: D. Benesch from the Texas TNC has until recently been concentrating on plant data entry. H. Sosinski has asked that she instead switch focus on vertebrates.
- **Action Item: The Committee approved this plan for Vertebrate Certification.**

### IV. Vital Signs Prioritization and Selection

- Vital signs selection will be the major focus in FY2006 and the main topic of the Phase II report. A variety of vital signs selection processes have been used by the networks. D. Perkins plans to present a detailed selection plan at our annual meeting but wanted some feedback on concepts. D. Perkins is suggesting that we use a two tiered approach. An initial workshop will be held to prioritize possible vital signs, and a second workshop will then select them. The prioritization workshop will be held in late October or early November (La Junta, CO, Santa Fe, Denver). This will be a large group (approximately 50 people) and will include park resource management staff and outside experts. Potential vital signs will be prioritized based on set criteria to create an initial list. Some potential criteria are:
  - Management Significance
  - Ecological Significance
  - Legal Mandate
  - Response Variability
  - Feasibility of Implementation

The main product of this workshop will be a prioritized list of vital signs.

- Actual selection will take place at a workshop in December or January (location TBD). This workshop will be limited to SOPN participants. Here, parks can adjust the prioritization to better suit actual needs and the cost of implementation. Using this method, we can avoid FACA concerns (having outside people make decisions).
  - B. Carey asked why there was a need for two separate workshops? D. Perkins answered that this will give us time to compile the information from the prioritization workshop. In addition both workshops will be 2-3 days in length necessitating more than a weeks time.
- D. Perkins initiated a brief discussion regarding what selection philosophy SOPN should use. Should we select vital signs (or bias them towards) those that are predictive in nature or those that are a management priority? Should we concentrate on common issues across parks or on the highest ranked issues for the individual parks. Should we give tiebreaker status or added weight to vital signs that are useful to cultural resources? B. Carey asked if there are any national guidelines or any specific vital signs that we should monitor. To date, water quality is the only required vital sign. In the past, some people questioned why we should monitor issues such as water quality when a park can't do anything to improve a situation (due to outside influences). The data can come in useful to support claims stating that outside influences are affecting park resources. Overall, there was support for focusing on issues that were common across several parks. If an individual park feels very strongly about a particular vital sign then this can be raised at the selection workshop.

## **V. Phase I Report**

D. Perkins proposed that everything for the Phase I report will be ready for review, with the exception of the aquatic models, by the August Meeting. A final draft that includes the aquatic models will be sent to the TC and BOD for by August 31. Both groups will be asked to complete the review by September 21 (three weeks). A TC and BOD meeting to discuss the report will occur via teleconference on September 21, 22, or 23. The completed report will then be ready for submission on September 30.

## **VI. Upcoming Projects**

- Continue conceptual model development (Aquatic, Pinion-Juniper, Deciduous forest, Landscape Vulnerability)
- Completion of the Phase I Report
- Line up PI for a SAND Rare Species Inventory in FY06.

- Data Management issues for FY06: NPSpecies plant certification, vegetation mapping, library cataloging. Much of this involves data entry work. SOPN will likely bring on a term or an intern to work on these projects as that they are outside the scope of a data manager.
- Develop a National Fish and Wildlife Foundation (NFWF) and Cooperative Conservation Initiative (CCI) 06 pre-proposal for prairie restoration. SOPN will probably submit a pre-proposal in May to NFWF provided things look good for CCI. The proposal will not be as extensive as our previous 9 park proposal because NFWF requires a 2-to-1 non-federal to federal match. So we will probably use parks that have the most non-federal match and are in close proximity.

**Meeting adjourned at 3:00 pm Central Time.**